Case Report

CROHN'S DISEASE WITH PYODERMA GANGRENOSUM IN A PATIENT IN NORTHERN NIGERIA: A CASE REPORT.

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ABSTRACT

Background: Crohn's disease is a major form of inflammatory bowel disease that can present with extra-intestinal manifestations. We report a case of Crohn's disease with pyodermagangrenosum in a Nigerian patient. The report is to alert physicians in our setting on the occurrence of this rare presentation.
Case presentation: The patient presented with chronic bloody and mucoiddiarrhoea with associated weight loss and fever of one-year duration. There was also history of mouth rashes, anal pain and itching. One month prior to presentation, he developed leg ulcer. Colonoscopy showed multiple ulcerations with normal intervening mucosa. Colonic mucosal histology showed focal area of ulceration with extensive inflammatory infiltrate in the lamina propia and submucosa. The patient's symptoms improved after the commencement of sulfasalazine.
Conclusion: Crohn's disease should be suspected in a patient with chronic leg ulcer.

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INTRODUCTION

Inflammatory bowel disease (IBD) is a chronic relapsing inflammatory condition of the gastrointestinal tract comprising Crohn's disease (CD) and ulcerative colitis (UC). Up to 40% of IBD patients will have extra-intestinal manifestations(EIM) with the incidence being higher in CD compared to UC.[2] Although, multiple organ systems can be involved in IBD, the most commonly affected organs are the skin, eye and joints[3] and up to one-third of patients with EIM will have skin involvement.[4] Among the skin manifestations of IBD are Aphthous stomatitis, Erythema nodosum, and pyoderma gangrenosum. [5]Pyodermagangrenosum is a severe ulcerating non-infectious neutrophilicdermatosis that is more commonly seen in UC patients than in CD patients.[6,7] To the best of our knowledge no report of CD associated with PG have been made in Nigeria although Some cases of PG have been reported in Nigeria with two associated with UC.[8,9] We report a case of CD with PG in a Nigerian patient.

CASE SUMMARY

The patient is a 42-year-old man who presented to the gastroenterology unit of Ahmadu Bello University Teaching Hospital, Zaria with a year history of recurrent mucoid and bloody diarrhoea associated with progressive weight loss and low-grade intermittent fever. He also has history of right lower abdominal pain, mouth rash with dysphagia and nasal regurgitation of feeds, anal pain and itching. One month prior to presentation, he developed right leg ulcer which started as a small swelling that later rupture discharging serosanguinous fluid. On examination, he was chronically ill, pale, dehydrated with grade III finger clubbing. He had an oral ulcer on the hard palate with exudative base measuring 3X2cm. He had an ulcer over the superomedial shin of the right leg measuring 8X8cm with indurated edge and dirty/necrotic base covered by granulation tissue and foreign substance. (Figure 1) Abdominal examination was unremarkable. Digital rectal examination revealed soiled anal area with anal tag at 11 O' clock position and a discharging ulcer at 3 O' clock position. Rectal mucosal was irregular and tender, but no mass felt. Examining finger stained with loose yellow stool. An initial diagnosis of IBD (CD) with a differential diagnosis of disseminated tuberculosis was made. His Haemoglobin was 9.1g/dL (normocytic normochromic picture), Erythrocyte Sedimentation Rate was above 140mm/hr. Patient was commenced on intravenous metronidazole and intravenous ciprofloxacin. Subsequently, colonoscopy was done and revealed multiple ulcerations with bumpy mucosa and normal area of intervening mucosa in the rectum and sigmoid colon (figure 2). Full colonoscopy could not be done due to poor bowel preparation. Colonic mucosa histology revealed focal areas of ulceration, extensive inflammatory infiltrate including neutrophils, lymphocytes, and plasma cells in

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the lamina propia and submucosa. There are some exudates in the crypts and areas of lymphocytic aggregates and granulation tissue. Leg ulcer biopsy showed ulcerated epidermis overlying intense necrotizing polymorphonuclear inflammatory infiltrates extending up to the deepest part of the specimen in one fragment a focus of cytoclasticvasculitis.

The patient was then commenced on oral sulphasalazine in addition to the antibiotics. The leg ulcer was also being dressed once daily. The patient's diarrhoea subsided, and the leg ulcer starts to heal with improvement in general well being. He was discharged after 5 weeks on admission to be followed up at gastrointestinal clinic.

DISCUSSION

CD is a major subtype of IBD which can affects any part of gastrointestinal tract.[10] About 10-15% of CD patients present with oral manifestations, while 20-30% has perianal lesions.[10] Our patient has the intestinal manifestations as well as the oral and perianal lesions, making the suspicion of CD highly likely. However, the condition was not diagnosed until about a year later after onset of symptoms despite seeking care from various health care facilities. This emphasize the need for high index of suspicion among physicians on the diagnosis of CD in our locality. The patient presented with chronic bloody and mucoiddiarrhoea, abdominal pain and weight loss which are the most common symptoms of CD.[11] Our patient had PG, which is relatively uncommon in CD patients with a prevalence of 0.5-2%.[11,12] Though some cases of PG has been reported in Nigeria, none has been associated with CD to the best of our knowledge. Thus, the index case present apparently rare occurrence of PG in CD patients in our locality. Therefore, finding of PG should lead to search for underlying IBD in a patient. PG can affect any part of skin but commonly affect extensor surface of the leg[2,] and this is consistent with the presentation of the index patient.

The patient was managed using ciprofloxacin, metronidazole and sulfasalazine with improvement in clinical symptoms, including the leg ulcer. Steroids which are also used in IBD patients are the mainstay of therapy.[2,5]Our patient was, however, not given steroids because it may delay healing of the perianal lesions. This case is one of the few cases of IBD with PG and the first reported case of CD with PG in Nigeria. High index of suspicion is required to make diagnosis of CD in patient with chronic leg ulcer.

Author's contributions: MM and MMF were the gastroenterologist that managed the patient, conceived and designed the report. They also carried out the colonoscopy with the biopsy. SSA and MSK reviewed the manuscript. BAK, EP and OE participated in the management of the patient. UA review the skin ulcer. AS and SDE reviewed the histology

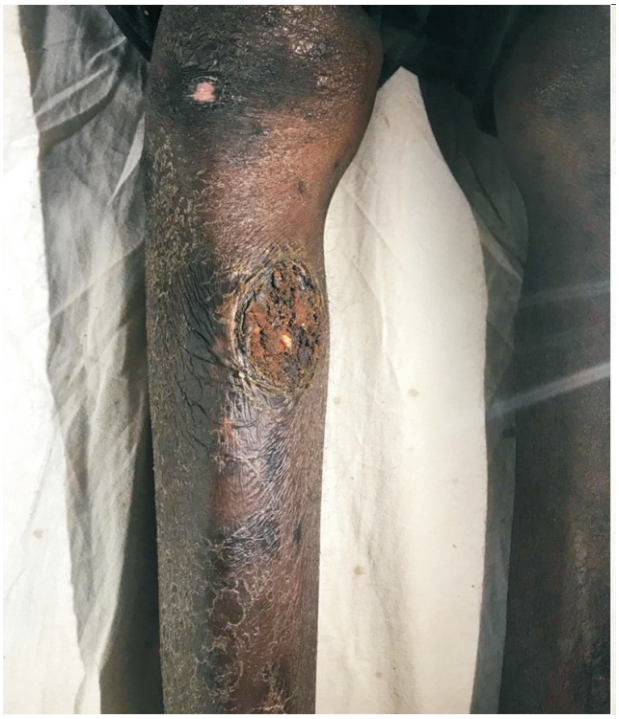

Figure 1: An ulcer with indurated edge and necrotic base covered with granulation tissue and foreign substance.

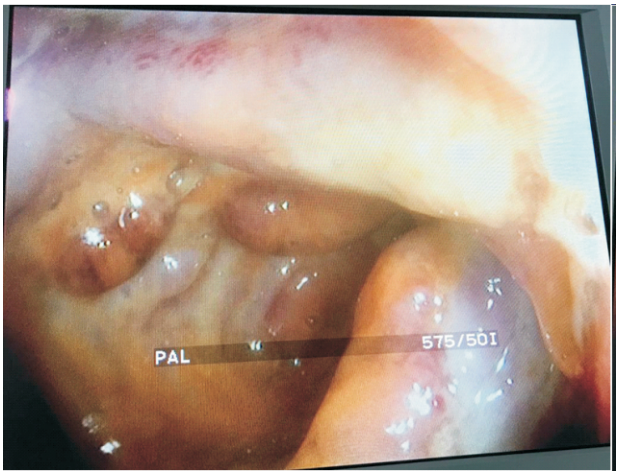

Figure 2: colonoscopic view showing multiple areas of ulcerations and normal intervening mucosa with cobblestoning.

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